

Message

From: Wilson, Patrick [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=841477851C614E1981C54C0372591BFE-PWILSON]
Sent: 9/12/2017 4:08:05 PM
To: Jeng, Cy@DTSC [Cy.Jeng@dtsc.ca.gov]; Wortham, Carol@DTSC [Carol.Wortham@dtsc.ca.gov]; Roy-Semmen, Shukla@DTSC [Shukla.Roy-Semmen@dtsc.ca.gov]; Halozan, Wayne@DTSC [Wayne.Halozan@dtsc.ca.gov]
CC: Appleby, Charlie [Appleby.Charlie@epa.gov]
Subject: Conference Call Information: Tues. 12 Sept 2017 @ 9:30 am PDT

- Conference Bridge C
- Conference Number: Ex. 6 Personal Privacy (PP)
- Participant (Access C

From: Jeng, Cy@DTSC [mailto:Cy.Jeng@dtsc.ca.gov]
Sent: Monday, September 11, 2017 1:33 PM
To: Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>; Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hi Patrick,

Please proceed without me as you have all the key players for this discussion tomorrow.

CY

From: Wortham, Carol@DTSC
Sent: Monday, September 11, 2017 1:31 PM
To: Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>; Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>; Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hello,

Both Wayne and I are available on Tuesday but not Wednesday.

Thank You,

Carol Wortham

Quality Management Officer
Environmental Chemistry Laboratory
(510) 540-3968

From: Roy-Semmen, Shukla@DTSC
Sent: Monday, September 11, 2017 1:26 PM
To: Wilson, Patrick <Wilson.Patrick@epa.gov>; Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>; Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>

Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Importance: High

Hello Dr. Wilson,

Thank you for arranging the call with Mr. Charlie Appleby. I am available to participate in a call tomorrow or Wednesday. However, since participation by Carol and Wayne, from ECL is key, as we are discussing specifics on analytical methodology, I will wait to hear back from them. CY has another meeting to attend tomorrow and so will not be able to call in; he is available on Wednesday.

Shukla Roy-Semmen, Ph.D.
Senior Toxicologist
Southern California Unit Chief
Department of Toxic Substances Control
California Environmental Protection Agency
5796 Corporate Avenue
Cypress, CA 90630
Phone: 714-484-5448

From: Wilson, Patrick [mailto:Wilson.Patrick@epa.gov]

Sent: Friday, September 08, 2017 12:13 PM

To: Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>; Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>

Cc: Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>

Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Good Afternoon Carol, Wayne, CY & Shukla,

EPA's National Program Manager (Charlie Appleby) for EPA's suite of analytical methods is available next week for a conference call regarding the outstanding issues or questions associated with EPA analytical method 1668(a-c) (congeners - compounds with dioxin-like activity).

Charlie is available both Tuesday (12 Sept) & Weds. 13 (Sept).

As you may recall – this conference call is pursuant to the development of the draft DTSC HHRA Note on PCBs.

Since Charlie is on the east coast, I'd like to propose an initial call on Tues. 12 Sept @ 9:30 am PDT.

Please let me know if this time is acceptable to you & I will follow up with a formal invite & announcement.

Kind Regards...



United States Environmental Protection Agency

Patrick Wilson, Ph.D., M.P.H. | Senior Regional Toxicologist | Regional Incident Coordination Team
415.972.3354 | wilson.patrick@epa.gov
US EPA Region IX | 75 Hawthorne St. (WST-5) San Francisco, CA 94105-3901
<http://www.epa.gov/region9/>

From: Wortham, Carol@DTSC [mailto:Carol.Wortham@dtsc.ca.gov]

Sent: Thursday, August 24, 2017 4:10 PM

To: Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>; Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>

Cc: Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>

Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hello Cy and Patrick,

Thursdays are not good for me, I have a weekly meeting that day.

8/30 I am out of the office at training

9/4 I am available until 1:30 pm

9/5 I am available until 3 pm

The other days until 9/30 are currently available or flexible.

Thanks,

Carol Wortham

Quality Management Officer
Environmental Chemistry Laboratory
(510) 540-3968

From: Halozan, Wayne@DTSC

Sent: Thursday, August 24, 2017 7:21 AM

To: Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>

Cc: Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>

Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Cy,

I am out of the office on 9/1, 9/21 + 22, and leave early Thursdays thru early November (football coach) – so if we schedule on Thursdays it has to be completed before noon.

Thank you

Wayne Halozan - Research Scientist II
Dept. of Toxic Substance Control (DTSC) – Ca EPA
700 Heinz Ave., Berkeley, CA 94710
(510) 540-3943, cell 1(530)304-6155
wayne.halozan@dtsc.ca.gov

From: Jeng, Cy@DTSC
Sent: Wednesday, August 23, 2017 4:19 PM
To: Wilson, Patrick <Wilson.Patrick@epa.gov>
Cc: Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Halozan, Wayne@DTSC <Wayne.Halozan@dtsc.ca.gov>; Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hi Patrick,

I had a quick discussion with Carol and Wayne (both with the ECL), and they will be happy to share their perspectives on Method 1668 with your EPA person responsible for the analytical method and hopefully to resolve any discrepancy, if necessary, for future projects.

Carol/Wayne, please provide your availability for the next few weeks so Patrick can arrange a call with his contact.

Thanks, CY

From: Jeng, Cy@DTSC
Sent: Thursday, July 13, 2017 2:01 PM
To: Wortham, Carol@DTSC; Wilson, Patrick
Cc: Roy-Semmen, Shukla@DTSC; Halozan, Wayne@DTSC
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hi Carol,

Thanks for your evaluation and recommendation on method 1668.

Patrick, please let us know if you (or your HQ contact) have questions regarding the recommendation by the ECL or additional information we have not seen. If necessary, we can arrange for a follow-up conference call to discuss.

CY

From: Wortham, Carol@DTSC
Sent: Thursday, July 13, 2017 1:51 PM
To: Jeng, Cy@DTSC; Wilson, Patrick
Cc: Roy-Semmen, Shukla@DTSC; Halozan, Wayne@DTSC
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hello Cy, Patrick, and Shukla,

I have taken the poster and reviewed it with one of my analysts. The SPB-Octyl column used in the study does cause fragmentation problems as they outline in the materials and method section. Understandable, this column is not optimum for the method. Other columns are available and can be used to meet criteria of the method. All versions of the method (1668A, B, and C) recommend the SPB-Octyl column but don't require it. If the fragmentation is of concern, specify that you don't want this column used or make the laboratory address the fragmentation in their analysis.

We still recommend that versions A and B be allowed for use in your project.

Thank You,

Carol Wortham

From: Jeng, Cy@DTSC
Sent: Friday, July 07, 2017 4:19 PM
To: Wilson, Patrick <Wilson.Patrick@epa.gov>; Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>
Cc: Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hi Patrick,

Thanks for following up on our inquiry on the method 1668. I will defer to Carol regarding the need for additional discussion once she has a chance to review the poster.

BTW, did Jim Polisini get back to you on the DTSC symposium on cumulative impacts in vulnerable communities on July 27? My guess is that it may be similar to and/or follow up from the one held in March (see the attached agenda).

Have a great weekend.

CY

From: Wortham, Carol@DTSC
Sent: Friday, July 07, 2017 3:55 PM
To: Wilson, Patrick <Wilson.Patrick@epa.gov>; Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>
Cc: Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>
Subject: RE: Analytical Methods (1668c) for Dioxin-like PCBs

Hello Patrick,

Is there any chance that we could get a copy of the poster mentioned below? An electronic version is fine.

Thank You,

Carol Wortham

Quality Management Officer
Environmental Chemistry Laboratory
(510) 540-3968

From: Wilson, Patrick [<mailto:Wilson.Patrick@epa.gov>]
Sent: Friday, July 07, 2017 3:49 PM
To: Jeng, Cy@DTSC <Cy.Jeng@dtsc.ca.gov>
Cc: Wortham, Carol@DTSC <Carol.Wortham@dtsc.ca.gov>; Roy-Semmen, Shukla@DTSC <Shukla.Roy-Semmen@dtsc.ca.gov>
Subject: FW: Analytical Methods (1668c) for Dioxin-like PCBs

Good Afternoon CY,

I hope this message finds you doing well.

I wanted to follow up on the conversation that we initiated last week regarding EPA's analytical method (1668c) for compounds with dioxin-like activity. As we discussed, prior to working with you on the Riverside Ag Park PCB site, we engaged with EPA HQ regarding method 1668c and some potential methodological issues.

We were put in touch w/Charlie Appleby, who is a senior official in the Agency's program office responsible for analytical method development & verification. Have a look at the e-mail string below. This may be informative for your laboratory personnel. We can follow up & discuss in more detail should your laboratory staff have additional questions or concerns w/1668c.

Best Regards Cy



United States Environmental Protection Agency

Patrick Wilson, Ph.D., M.P.H. | Senior Regional Toxicologist | Regional Incident Coordination Team
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US EPA Region IX | 75 Hawthorne St. (WST-5) San Francisco, CA 94105-3901
<http://www.epa.gov/region9/>

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**From:** Wilson, Patrick

**Sent:** Friday, October 23, 2015 5:25 PM

**To:** Appleby, Charlie <[Appleby.Charlie@epa.gov](mailto:Appleby.Charlie@epa.gov)>

**Cc:** Beach, John <[Beach.John@epa.gov](mailto:Beach.John@epa.gov)>; Baylor, Katherine <[Baylor.Katherine@epa.gov](mailto:Baylor.Katherine@epa.gov)>; Berg, Marlene <[Berg.Marlene@epa.gov](mailto:Berg.Marlene@epa.gov)>; Plate, Mathew <[Plate.Mathew@epa.gov](mailto:Plate.Mathew@epa.gov)>

**Subject:** RE: Analytical Methods for Dioxin-like PCBs

Hi Charles — Good Afternoon,

Thank you for agreeing to speak with us regarding a potential issue that one of our scientist here in the regional office has identified with the Agency's analytical approach with the PCB dioxin-like congeners — EPA Method 1668c. I wanted to provide you with a brief description of the issue we are confronting in anticipation of speaking with you directly.

Our division here in Region IX is responsible for characterizing & conducting risk-based cleanups for hazardous waste sites regulated under RCRA & TSCA. We have a number of PCB sites that we routinely characterize based upon their aroclor profile — & when those sites are contaminated with “weathered PCBs” — we have routinely submitted a small subset of samples for additional characterization for their dioxin-like or co-planar PCB congener content.

John Beach has been following the literature on PCB congener analysis & has noted that potential interference by highly chlorinated congeners in high concentrations can frequently lead to spurious findings. As you likely know, PCB 126 — because of its toxicity equivalence value — is often a “risk driver” when weathered PCBs impact various media (soils, biota, impacted building materials). John has identified some mass spectroscopic issues associated with its analysis which leads him to believe that our analytical method has the potential to significantly overestimate the concentration of PCB 126 identified in individual samples.

More specifically, the concern seems to resolve around the idea that when samples contain a high concentration mixture of congeners in addition to PCB 126 (128, 166 & 175) — the potential for overestimating the concentration of PCB 126 occurs because of a unique fragmentation pattern. Evidently, the loss of chlorine ( $\text{Cl}^\bullet$ ) or a single chloride ion ( $\text{Cl}^-$ ) from congeners 128, 166 or 175 during ionization may interfere with the ability to accurately resolve the PCB 126 peak? This potentially results in an overestimation of the PCB 126 concentration in the sample?

Because many of our cleanup & permitting decisions under RCRA & TSCA are risk-based – this putative overestimation of congener 126 may result in risk management decisions that are unnecessarily conservative – essentially requiring more remedial actions (cleanup) or more restrictive permit conditions than would otherwise be required.

If possible - John & I would like to give you a call perhaps next week to discuss this issue & determine if you have any insights or advice. I will also copy/attach a pdf poster that highlights this potential ionization issue from John's investigations.

Thanks in-advance Charlie for any suggestions or insights you can share.

Kind Regards...

<< File: Hart 2008 Data Defrag poster.pdf >>

**From:** Appleby, Charlie

**Sent:** Friday, October 23, 2015 5:36 AM

**To:** Berg, Marlene <[Berg.Marlene@epa.gov](mailto:Berg.Marlene@epa.gov)>; Wilson, Patrick <[Wilson.Patrick@epa.gov](mailto:Wilson.Patrick@epa.gov)>

**Subject:** RE: Analytical Methods for Dioxin-like PCBs

Marlene,

Thank you, I will be happy to assist.

Charlie Appleby  
CLP Organic and NRAS Program Manager  
Analytical Services Branch  
OSWER/OSRTI/TIFSD  
(703) 347-0266 (Potomac Yard)  
(703) 405-0057 (Mobile)

**From:** Berg, Marlene

**Sent:** Thursday, October 22, 2015 5:38 PM

**To:** Wilson, Patrick <[Wilson.Patrick@epa.gov](mailto:Wilson.Patrick@epa.gov)>; Appleby, Charlie <[Appleby.Charlie@epa.gov](mailto:Appleby.Charlie@epa.gov)>

**Subject:** Analytical Methods for Dioxin-like PCBs

Hi Charlie,

I guess I have one more referral for you this week.

Patrick Wilson is a senior toxicologist in Region 9 with whom I have worked with over the years. He is looking for someone with technical expertise regarding analytical methods for dioxin-like PCB congeners. I am recommending that he contact you.

Marlene